Please provide the following information, and submit to the NOAA DM Plan Repository.

# Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

# 1. General Description of Data to be Managed

# 1.1. Name of the Data, data collection Project, or data-producing Program:

2010 USGS Lidar: North Slope, Alaska

### 1.2. Summary description of the data:

This metadata record describes the unclassified, last return, point cloud data for the 2010 USGS North Slope of Alaska lidar project. This record was created by the NOAA Office for Coastal Management (OCM) because no metadata record or data report were available for the data. Information to create this record was found here: https://topotools.cr.usgs.gov/posters/arctic\_coast\_alaska.pdf and from the tile metadata for AK\_NORTHSLOPE\_UTM5\_2010\_000001 at USGS EarthExplorer.

This 2010 data set is part of the USGS assessment of coastal change hazards, over 11,000 km2 of airborne lidar elevation data were collected along the Arctic coast of Alaska between 2009 and 2012. Data coverage includes the barrier islands and mainland coast between Icy Cape and the U.S.–Canadian border, from the shoreline to ~1.5 km inland. Data coverage extends further inland to around 3 km on the Barrow Peninsula and along the coast of the Teshekpuk Lake Special Area (TLSA) where coastal erosion rates are among the highest in the world (> 18 m/yr). Nominal point density is 1.5 m and vertical accuracy is better than 30 cm. Data were not collected over most river deltas or large embayments, with the exception of Admiralty Bay, Smith Bay (Ikpikpik Delta), Kogru River, and the Fish Creek portion of Colville River Delta. The primary use of the lidar data is to establish a modern shoreline position to be used for change analyses with historical shoreline positions. However, the lidar DEM provides a wealth of topographic and intensity data that can be used for morphological mapping of the remote arctic coast.

This is one of the first comprehensive lidar datasets collected in a continuous permafrost environment. Many periglacial landscape features, such as patterned ground, ice-wedge polygons, and thermokarst lakes and former lake basins (recent and relict) are discernible in the dataset. Traditional coastal landscape features including shoreline position, beach width, slope, and bluff height and morphology are also distinct.

Acquired by Aerometric, Alaska; Funded by USGS National Geospatial Program, Coastal and Marine Geology Program, Alaska Science Center; U.S. Fish and Wildlife Service, Arctic Landscape Conservation Cooperative; U.S. Bureau of Land Management

The NOAA Office for Coastal Management (OCM) downloaded this lidar data from the AK DGGS site (https://elevation.alaska.gov/) and processed the data to be available on the Digital Coast Data Access Viewer (DAV).

# 1.3. Is this a one-time data collection, or an ongoing series of measurements?

One-time data collection

# 1.4. Actual or planned temporal coverage of the data:

2009-04-27 to 2010-08-03

### 1.5. Actual or planned geographic coverage of the data:

W: -159.81, E: -141.108, N: 71.389, S: 69.604

### 1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.) point digital data (LAS)

### 1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

# 1.8. If data are from a NOAA Observing System of Record, indicate name of system:

### 1.8.1. If data are from another observing system, please specify:

# 2. Point of Contact for this Data Management Plan (author or maintainer)

### 2.1. Name:

NOAA Office for Coastal Management (NOAA/OCM)

### 2.2. Title:

Metadata Contact

# 2.3. Affiliation or facility:

NOAA Office for Coastal Management (NOAA/OCM)

### 2.4. E-mail address:

coastal.info@noaa.gov

### 2.5. Phone number:

(843) 740-1202

### 3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

### 3.1. Name:

### 3.2. Title:

Data Steward

#### 4. Resources

Programs must identify resources within their own budget for managing the data they produce.

- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management ( specify percentage or "unknown"):

# 5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

# 5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

**Process Steps:** 

- 2018-05-31 00:00:00 - The NOAA Office for Coastal Management (OCM) downloaded 1258 laz files from the Alaska Division of Geological and Geophysical Surveys data Portal (https://elevation.alaska.gov/). The files contained unclassified (last return) elevation and intensity measurements for the 2010 North Slope AK data set. The data were in UTM Zones 4, 5, 6, and 7 coordinates and ellipsoid (GRS80) elevations in meters. The data were unclassified last returns. The NOAA Office for Coastal Management processed all points to the Digital Coast Data Access Viewer (DAV). OCM performed the following processing on the data for Digital Coast storage and provisioning purposes: 1. The LAStools software scripts lasinfo and lasvalidate were run on the laz files to check for errors. 2. An internal OCM script was run to check the number of points by classification and by flight ID and the gps and intensity ranges. 3. Internal OCM scripts were run on the laz files to convert from UTM Zone 4, 5, 6, and 7 coordinates to geographic coordinates, to assign the geokeys, to sort the data by gps time and zip the data to database and to http.

# 5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

## 5.2. Quality control procedures employed (describe or provide URL of description):

### 6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

# 6.1. Does metadata comply with EDMC Data Documentation directive?

No

### 6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:

- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

### 6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

### 6.2.1. If service is needed for metadata hosting, please indicate:

## 6.3. URL of metadata folder or data catalog, if known:

https://www.fisheries.noaa.gov/inport/item/52766

# 6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC\_PD-Data\_Documentation\_v1.pdf

### 7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is

explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

# 7.1. Do these data comply with the Data Access directive?

- 7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?
- 7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:
- 7.2. Name of organization of facility providing data access:

Office for Coastal Management (OCM)

7.2.1. If data hosting service is needed, please indicate:

### 7.2.2. URL of data access service, if known:

https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=8534 https://coast.noaa.gov/htdata/lidar2 z/geoid12b/data/8534

# 7.3. Data access methods or services offered:

Data is available online for custom or bulk downloads.

- 7.4. Approximate delay between data collection and dissemination:
  - 7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

### 8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

# 8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

### 8.1.1. If World Data Center or Other, specify:

# 8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

- **8.2. Data storage facility prior to being sent to an archive facility (if any):**Office for Coastal Management Charleston, SC
- 8.3. Approximate delay between data collection and submission to an archive facility:
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

# 9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.